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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|-----------------------|------------------|
| 09/866,225 | 05/24/2001 | Sheng Sun | 005333/DISPLAY/AKT/BG | 5889 |

32588 7590 09/09/2003

APPLIED MATERIALS, INC.
2881 SCOTT BLVD. M/S 2061
SANTA CLARA, CA 95050

EXAMINER

MARKOFF, ALEXANDER

| | |
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| ART UNIT | PAPER NUMBER |
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1746

DATE MAILED: 09/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,225

Applicant(s)

SUN, SHENG

Examiner

Alexander Markoff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al (US Patent No 6,039,834).

This rejection made in the previous Office action is maintained.

3. Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Shrotriya (US Patent No 5,843,239).

This rejection made in the previous Office action is maintained.

Response to Arguments

4. Applicant's arguments filed 6/20/03 have been fully considered but they are not persuasive.

The applicants argue that the rejection over Tanaka et al is not proper because, according to the applicants, Tanaka et al teach heating only by a heated pedestal. The applicants further argue that Tanaka et al do not teach a separate heating module.

The examiner disagrees.

First, Tanaka et al also teach by internal lamps as an alternative heating, see at least column 10, lines 29-35.

Second, the applicant's arguments are more specific than the claims. The claims do not exclude the heating module being a pedestal or a lamp.

It is also noted that the applicants allege that Tanaka et al teach application only remote plasma during the cleaning.

This is not persuasive. In contrast to the applicant's argument Tanaka et al also teach an embodiment wherein the in-situ plasma is used. See at least column 26.

It is further noted that the applicants argue that claims 1-18 require a thermal cleaning.

This argument is also more specific than the claims. This is because, the claims are silent regarding the "thermal cleaning". The claims require only increasing a temperature of the chamber parts using a heating module. Such increasing is disclosed by the applied document.

The applicants argue that the rejection over Shrotriya is not proper.

The applicants argue that Shrotriya teaches only external lamp.

This is not persuasive.

First, Shrotriya also teaches an internal resistive heater. See at least column 5, lines 59-61.

Second, it is noted that the position of the heater inside the wall is considered by the specification and claims as being meeting the limitation to be located inside of the chamber. It is also noted that the embodiment where lamps are separated from the reactive environment of the chamber by a wall of the lamp assembly is considered by the disclosure as being meeting the limitation to the lamp assembly to be located inside of the chamber. See at least Figures 2 and 3. Thus the teaching of Shrotriya, which

discloses the chamber wall comprises the wall of lamp assembly (28), meets the limitations of the instant claims.

The applicants are also state that Shrotria teaches only in-situ plasma and fails to teach thermal cleaning.

This is not persuasive.

First, as it has been discussed above the claims are silent regarding the "thermal cleaning".

Second, in contrast to the applicant's statement, Shrotria teaches the thermal cleaning. See at least column 4, lines 4-7.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Markoff whose telephone number is 703-308-7545. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P Gulakowski can be reached on 703-308-4333.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703--308-0651.



Alexander Markoff
Primary Examiner
Art Unit 1746

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ALEXANDER MARKOFF
PRIMARY EXAMINER